



ECam User Manual and Quick Reference Guide -

Thank you for purchasing the Vivitar ECam Digital Camera. Ecam brings to you the ease-of-use of a traditional camera, combined with high-tech functionality. ECam captures up to 24 images.

Once you have finished taking your images, you may download and view on your personal computer. From there, you can use the included image editing software to enhance your images before you print or email them.

This booklet is divided into two sections. The first section is a brief guide that will quickly familiarize you with the basic features and simple operation of ECam. The second section explains ECam in greater detail.

Section 1 - ECAM Quick Installation Guide

Follow the these steps to get ECam working for you -

Step 1: Install the Battery --

- ECam uses a standard 9-volt DC battery. When Ecam is put into its package there is a piece of tape over the two battery terminals. Remove this tape.
- Open the battery compartment. Use your thumb to slide the battery door open. After you have removed the tape from the battery terminals, insert the battery into the compartment. There is a decal inside that shows the proper way to place the battery. (The round battery terminal faces down.) Once the battery is in place, replace the cover and installation is complete!

Step 2: Turn on ECam and Take a Picture --

- Slide the power switch to the right. ECam will beep twice to tell you that it is OK and ready to take a picture.
- Look at your subject through the view window and press the

shutter button to take a picture. ECam will beep once to tell you that the picture was taken. If ECam makes three low-beeps, it is telling you that it was not ready to take a picture. Try again.

Step 3: Connect ECam to your Computer --

- Plug the large end of the cable that comes with ECam into a 9-pin port on the back of your computer.
- Plug the small end of the ECam cable into the data port on ECam

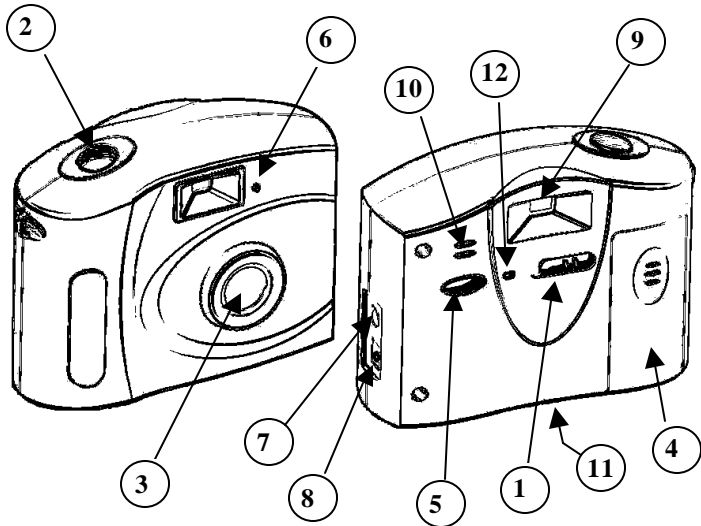
Step 4: Install the Software --

- Install the Live Pix Looney Tunes software. (You only need to do this once.) Insert the CD-ROM into your CD drive. It should run automatically. Follow the screen messages to finish the installation. If it does not run automatically see detailed instructions. Don't forget to run the LivePix tutorial!

Step 5: Download your Pictures --

- Start Live Pix Looney Tunes software. Click on the small Ecam icon to download your pictures into the Looney Tunes Software. You are now ready to insert your pictures into any one of the many Looney Tune project templates. Have fun!

Getting to Know ECam -



1. On/Off switch - Slide to the right to turn ECam on. When ECam turns on you will hear two short beeps. Slide to the left to turn ECam off.
2. Shutter button - Press to take a picture. Every time you take a picture ECam beeps once.

3. Lens - Ecam looks through the lens to take a picture.
4. Battery compartment - The 9 V battery goes behind this door. To open the battery door slide it downward.
5. Self-Timer Button - To use the self-timer first press and hold the self timer button, and then press the shutter button. The RED LED will blink ten times. Then Ecam takes a picture.
6. Self-timer LED - This RED LED will blink ten times before Ecam takes a timed-picture.
7. Data Port - When you connect Ecam to your computer, plug the small end of the cable into the top hole. This hole is labeled "I O I O I". That's the computer symbol for data.
8. AC adapter Port - If you have an AC adapter, plug it into the bottom hole.
9. View finder - Look through here before taking a picture.
10. Speaker - When Ecam has something to tell you it make sounds from this tiny speaker.
11. Tripod socket - On the bottom of Ecam is a place where you can mount Ecam onto a tripod. This is often used with the self-timer feature.
12. Memory Full LED - When memory is full, this LED will turn red. This tells you to STOP taking pictures and download the ones you have taken to your computer.

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What Comes with ECam?

ECam comes with the following items –

- ECam Digital Still Camera with Hand Strap
- ECam User Booklet
- Live Pix Looney Tunes Photo Print Studio CD-ROM
- Looney Tune Software Template Booklet
- A cable which connects Ecam to your PC
- 9 Volt battery

What is on the CD-ROM?

The CD-ROM contains Looney Tunes Photo Print Studio. Looney Tunes is a project-oriented software that allows you to take the images from your ECam and place them creatively into projects and templates which feature your favorite Warner Brothers Looney Tunes characters. The version of Looney Tunes on your CD is optimized to work directly with ECam.

The CD-ROM includes an impressive instructional tutorial which will show you how to use Looney Tunes Photo Print Studio.

How do I take a Picture with ECam?

Taking a picture with ECam is easy. Simply turn ECam on, look at your subject through the viewfinder, and press the shutter button.

1. **Turn ECam on** by sliding the Power button (Item 1) to the right. When the camera powers-up, you will hear two short beeps ("beep-beep").
2. **Look through the viewfinder (Item 9).**
3. To take a picture, **press the shutter** button (item 2), just like a traditional camera. Each time ECam takes a picture successfully you will hear a single "beep". This is called the confirmation tone. ECam is very fast. ECam can save your images almost as fast as you can press the shutter again!

Note: If by chance, ECam is not quite ready to take the next picture you will hear three short "boop" tones ("boop-boop-boop"). ECam is telling you that it is not ready - or - it is too dark to take a good picture.

How many Pictures Can ECam take?

ECam can hold twenty-four (24) pictures. When ECam's memory is full, the red LED (item 12) will be bright, steady red. Once ECam's memory is filled, you must erase them before taking new ones. After you erase these 24 pictures you can reuse ECam's memory over and over thousands of times. It's like have an endless roll of film! To save your images permanently, transfer them from ECam to your PC.

A technical note just for Kids: ECam's memory is "volatile". This means that ECam requires a small amount of battery power to keep your pictures in memory. If you remove or change the battery you will loose your images.

How do I Know when ECam's Memory is Full?

ECam has two ways of telling you that memory is full.

- 1) After you have taken your twentieth (20th) image you will hear a warning tone. After you take the 20th picture you will hear the normal single beep (the confirmation tone), immediately followed by a short burst of four short beeps.
- 2) After you have taken your twenty-fourth (24th) image you will see the red LED on the back of ECam turn bright red. ECam is saying, "Stop! Memory is full."

How do I Erase Pictures so I can take more?

Erasing old pictures is simple. There are three ways.

- 1) Every time you transfer images from ECam to your computer, the images will be moved out of ECam to your computer and now ECam is "empty" and ready to take 24 more images.
- 2) If ECam's memory is full, the red LED on the back (item 12) will be a bright, steady. You can erase all 24 images if you hold the shutter button (item 2) for more than three seconds. You will hear many rapid beeps and the Red LED will turn off. ECam memory is now empty.
- 3) You can open the battery door and remove the battery for several seconds. This will erase all images in ECam's memory even if memory was not full.

What do the red LEDs Mean?

If you see this -	ECam is saying -
The LED on the back of ECam is a bright, steady RED	ECam's memory is full. All 24 images have been taken
The LED on the front of ECam is flashing	ECam is going to take a picture in self timer mode, after the tenth flash

What do the Sounds Mean?

If you hear this sound -	ECam is saying -
After ECam is switched on - two short beeps (high pitch)	ECam is ready to take pictures
After you press the shutter button - one short beep (high pitch)	ECam has successfully taken a picture. This is called the "confirmation tone"
After you press the shutter button - three short boops (low pitch)	ECam is not ready. Either ECam needs a little more time, or it is too dark to take a picture
After one minute where no one has paid attention to ECam - two short beeps (high pitch)	ECam is bored and wasting batteries. To save your battery you should switch ECam off
After you press the shutter button - one short beep (high pitch) followed by four rapid beeps	Memory warning - ECam has taken 21 images and it is close to being full
After you press the shutter button with the red LED ON - a continuous sequence of rapid beeps	Memory is full and you will erase all 24 images if you hold the shutter down for more than 3 seconds

How do I Use the Self-Timer?

ECam has a 10-second self-timer. To use this function press and hold the self-timer button down and then press the shutter button. This will activate the self-timer LED that will begin to flash once per second for ten seconds (ten flashes). After the tenth flash, ECam will take a picture.

Let's Talk about Batteries.....

ECam camera uses a standard 9-volt "transistor radio" battery.

- Even when ECam is turned OFF, there is a very slight drain on the batteries. This is required to retain your images that are in memory. If you are not going to use ECam for a while (days), remove the battery. Removing the battery will make your battery last longer. It also prevents battery leaks or corrosion from hurting ECam.
- Note that if you do remove the battery, all images that are stored inside ECam will be lost.
- If the battery goes dead, simply insert a new one, or use an (optional) AC power supply.
- If you must dispose of your old batteries, please exercise environmentally correct means of disposing, or recycling them.

Note: When fitting a battery into ECam, check the polarity markings on the battery to ensure that you insert the battery correctly.

ECam reminds you to turn it off --

ECam is designed to remind you to turn it off. If ECam has not been used for a while, it will sound a double-beep every minute. In this condition ECam has gone into a power-saving sleep mode. Turn ECam off to preserve the battery.

Technical note for kids: Please don't forget to turn off ECam. It will double-beep for days. It will drive your parents crazy and it will run your battery dead in a few days, or less.

Vivitar Corporation has been developing and marketing Digital Still Cameras since 1996. In that time we have learned a great deal from our customers about consumer digital imaging. One of the most common concerns is battery life. We suggest the use of rechargeable batteries and perhaps an AC power adaptor that allows you to use household AC power to operate your camera. These are available at your local electronics or computer store.

What kind of Computer do I need?

- An IBM compatible PC with a Pentium processor
- Microsoft Windows 95, or Windows 98. (Windows 3.x and Macintosh are not supported)
- 16MB or more of RAM
- 45MB of hard disk space for the Live Pix software
- An available serial port for downloading your pictures
- A CD-ROM drive to load and run the Live Pix software
- A color display/monitor capable of displaying 800x600 (16-bit color) is preferred
 - If your display is only capable of 640 x 480, it will be more difficult to see the entire Live Pix Looney Tunes project screen
 - If your display/monitor is set to 256 colors your images will appear dull and colorless
 - Refer to your computer manual to see how you can adjust your display settings

How do I Connect ECam to My Computer?

In order to connect ECam to your computer you must 1) install the software, 2) connect ECam to your computer using the included cable. 3) Start the software and download pictures from ECam to your computer. Additional detail follows -

Software Installation --

Install the Live Pix software. Insert the CD-ROM into your CD-ROM drive. It is designed to automatically run. If it does not, follow these steps for Windows 95 or 98. Click on Start, Run, and then type d:\setup, Enter (or OK). (If a drive letter other than d identifies your CD drive; use that letter in place of the d:) Follow the screen instructions to complete the installation.

Connection to your Computer --

Connect ECam to a serial connection on your computer (PC) by plugging the included data cable into an available 9 pin serial (COM) port on the back of your PC. These ports are located at the back of your computer. Look for a connector that is D-shaped, has two rows of (male) pins, with a total of nine pins. Most desktop computers have two COM ports, whereas most notebook computers have one COM connector. While most

desktops have two serial ports, many times your mouse, or possibly an external modem will occupy one of them. It is further possible that your computer may have a 25 pin male serial connector. If this is the case, you may purchase a 25F to 9M adapter at a local electronics or computer store. However, do not purchase a “null modem” adapter, as it will not work) Connect the small end of the cable to the ECam, to the port marked “I O I O I”.

How do I get ECam Pictures to my Computer?

Now that your software and cables are installed, the final step is to download your ECam images to your computer.

1. Connect the cable and turn on ECam
2. Launch (Start) Live Pix Looney Tunes Photo Print Studio
3. After Looney Tunes is up and running, click on the ECam camera icon. All pictures in ECam's memory should transfer to Live Pix. ECam's memory will then be erased for you to use again.

Note: You may also use ECam with other imaging software by using what is called a Twain driver which is available on the Vivitar website, www.vivitar.com

What are ECam's Technical Specifications?

- Image Resolution: 160 x 120 pixels
- Image Sensor: CMOS
- Color: 24-bit (16.7 million colors)
- Memory: 4 Mbit internal memory
- Storage: 24 images
- Data compression: None
- File format: BMP
- Range of focus: 6 inches to 8 feet (for best results)
- Connectors: AC adaptor, RS232 serial port
- Weight: 5.5 ounces (with battery), 4.5 ounces without
- Dimensions: (W) 4" x (H) 3" x (L) 1.7"
- Recommended battery: 9VDC alkaline
- AC power adapter requirements -
 - 9 VDC output
 - UL approved
 - 100 milliAmp rating
 - Plug = 4.0 x 1.7 x 9.5 mm, Polarity: center positive

(Design and specifications are subject to change without notice)

Trouble Shooting and Technical Support

If your ECam does not appear to work properly, please do not return it to the store for technical assistance. For technical assistance consult our website at www.vivitar.com

Here are a few basic guidelines to solving problems with ECam-

- 1) Review this Owner's booklet.
- 2) Determine if your problem is related to your camera, or your computer connection by checking ECam's basic operations:
 - Does it turn-on?
 - Can you take a picture, and does the camera beep?If ECam beeps, most likely it is functioning correctly.
- 3) If you cannot get your ECam to connect to your computer (the Looney Tunes software), please consult your PC manufacturer, or consult a local PC technician and have your serial (COM) ports checked. Our technical support staff can help you with your ECam, but are not able to give expert advice regarding the configuration of your PC.

We provide technical support for 30 days, limited to three calls. Technical Support is available 24 hours a day, 7 days a week. You may reach technical support at (949)-595-2199.

If your computer will not connect to ECam -

Connecting a digital camera to a personal computer is perhaps the most challenging (sometimes-frustrating) aspects of consumer digital imaging today. If your computer cannot connect to ECam your computer's serial ports must be examined. You can inspect your ports using the Windows device Manager. Click on Start, Settings, Control Panel, System, Device Manager (tab), Ports (COM & LPT).

For assistance in enabling or setting your ports, consult your PC system manual or manufacturer. In some cases, changes may need to be made to your System BIOS. Please consult a knowledgeable PC expert before attempting any such changes or modifications.

Warranty Policy

ECam is under warranty for a period of ninety (90) days the date of purchase, by the original purchaser. In case of defects in materials or workmanship, Vivitar Corporation will repair or replace ECam free of charge within the warranty period. This warranty applies to the camera only. This warranty does not include batteries, or other accessories that have not been manufactured by Vivitar Corporation. This warranty will not be honored if the camera has been mishandled or tampered with, or altered by anyone other than the manufacturer. Other than for the warranty herein, Vivitar Corporation is not responsible for loss, damage, or inconvenience of any kind.

Prior to returning a camera, you must first obtain an RMA number from Vivitar Technical Support or Customer Service. The RMA number, a brief description of the difficulties encountered, and proof-of-purchase (with the date of purchase clearly indicated) must accompany a defective ECam being returned under warranty. Prior to returning any product you must call Technical Support or Customer Service to attempt to diagnose the problem and receive an RMA number. All related shipping and transportation costs and insurances are at the owner's expense. Any alteration of this warranty cannot be made without Vivitar Corporation's written approval.

Replacement or repair shall be at the sole and exclusive discretion of Vivitar and performed only at Vivitar or by an authorized repair facility. Defective products being returned to Vivitar for warranty must arrive

freight prepaid and said freight shall be non-refundable, unless otherwise agreed upon by Vivitar and authorized in writing. In-warranty period, replacements are warranted only to the remaining, unexpired portion of the original warranty period applicable to the repaired or replaced parts. This warranty only applies to parts and labor provided by the Seller under valid warranty claims, and is contingent upon proper use of the Product. Vivitar shall not be liable for any damage to products resulting in whole or in part from use of components, accessories, parts or supplies not furnished by Seller or which do not meet Vivitar's specifications. This warranty does not apply to any computer hardware product, which does not bear a serial number.

All obligations of seller under this warranty shall cease, if any of the following occur: (1) Products are subject to accident, abuse, alteration, unusual physical and electric stress, neglect, misuse, or any other uncontrollable causes; (2) Adjustment, repair or parts replacement not within Vivitar's specifications; (3) Repair or replacement of any parts, by any party other than Vivitar or its authorized service centers.

This warranty supersedes any and all previous warranties, expressed or implied. Non-company representatives are not authorized or permitted, at any time, to make any warranty claims or assume any additional liability not in strict accordance with the above outlined warranty.

All claims under warranty must be made promptly after occurrence of problem, and received within the applicable warranty period by Vivitar. Before you can return any equipment for repair, you must obtain a

return authorization number (RMA#) and instructions as to how and where said equipment should be shipped. RMA numbers are only valid for 14 days from the date of issuance. Any merchandise received after this time or without the RMA # will be refused. Vivitar reserves the right to reject any non-acceptable means of transportation. When equipment is returned for any reason, the sender shall be responsible for all damage resulting from improper packing or handling, and for loss in transit, notwithstanding any defect or nonconformity in the equipment. In all cases, Vivitar has sole responsibility to determine the cause and nature of said problem, and said determination with regard thereto shall be final.

To contact us:

Vivitar Corporation
1280 Rancho Conejo Blvd.
Newbury Park, CA 91320
(949) 595-2199 24 hour Technical Support
(805) 498-7008 x105 Customer Service (M-F)

Instructions for a return:

1. Call for a RMA#
2. Put RMA# outside of packaging box
3. Enclose product description
4. Enclose copy of proof of purchase
5. Ship package prepaid and insured (We do not accept C.O.D. shipments)

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in commercial installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, detectable by turning the equipment in question off and on, the user is encouraged to try to correct the interference by one or more of the following measures. 1) Re-orient, or relocate, the receiving antenna. 2) Increase the distance between the equipment and the receiver. 3) Connect the equipment to an outlet on a different circuit than that which the receiver is connected to. 4) Consult your dealer or an experienced radio/TV technician for help.

Cautions and Warnings --

Protect ECam from physical dangers-

Take care not to drop ECam. This may cause a problem. If ECam has been dropped or the case has been damaged, switch the camera off, disconnect the power source (batteries or AC power adapter) and then contact your dealer or your local authorized service facility. Do not continue to use ECam if it is damaged as this may cause a fire or electric shock.

Do use or store ECam in extremely damp or dusty locations or in a location subject to fumes or steam, such as near a stove or humidifier. Take particular care when it is raining or snowing or when you are using the camera at the beach or near water. Water in the camera may cause a fire or electric shock.

Do not leave ECam camera in hot places like a closed car, or in direct sunlight. High temperatures may hurt or even melt ECam.

Do not use Ecam if it has been dropped into water or if water has gotten inside. Get an adult to switch ECam off, and disconnect the power source (battery or AC power adapter). Then contact your dealer or your local authorized service facility. Do not continue to use the camera as this may cause a fire or electric shock. (The same precaution applies to foreign objects entering ECam)

If you purchase and use an AC adapter please be careful -

Always unplug ECam from the AC power adapter and the adapter from the AC power outlet after you have switched off ECam and are not going to use it. Do not leave ECam plugged into the wall and go away. Always unplug for safety.

When using an AC adapter, make sure there is good ventilation. Never cover or

wrap the ECam or the optional AC power adapter with a cloth or quilt. This may cause heat to build up and distort the case, or cause a fire.

Do not use this ECam near water with the AC adapter. This may cause an electric shock.

Do not touch the power plug during a thunderstorm if you are using the AC power adapter. This may cause an electric shock.

Battery Cautions -

Do not use batteries other than those specified for use with Ecam. The use of unsuitable batteries may result in the batteries splitting or leaking and causing a fire, injury, or damage to the battery compartment.

Do not subject a battery to strong impacts, such as hitting it with a hammer, stepping on it, or dropping it. Any of these may cause the battery to split or leak causing fire or injury.

Remove the battery if the camera will not be used for more than a few days, or a week. The battery will drain very slowly and may eventually leak and damage the battery compartment. If the battery leaks, clean and wipe the battery compartment carefully and install a new battery. Wash your hands carefully if you touch the battery fluid.

Do not heat, or attempt to disassemble a battery, and do not place a battery in water or in a fire. Any of these situations may cause the battery to split or leak, cause fire or injury.

Do not carry or store a battery with objects such as metal pens, necklaces, coins or hairpins. This could short-circuit the positive and negative poles of the battery. This could cause the battery to split or leak, resulting in fire or injury.

General Precautions -

Do not use ECam if it is emitting smoke, is unusually hot to the touch, is emitting any unusual odor or noise, or is in any other abnormal state. If any of these things are happening, stop using ECam immediately. Get an adult to help you. Have them turn the camera off, and disconnect the power (battery or AC power adapter).

Never attempt to repair or modify ECam yourself. Do not remove the camera casing. This may cause an electric shock. Your dealer or local authorized service facility should carry out internal inspection, maintenance and repairs.

Do not place ECam in unstable locations such as on a wobbly table or sloping surface where the camera may fall or tip over and cause injury.

Never use ECam to look through the viewfinder while you are operating a moving car, motorcycle, or bicycle. This may cause a traffic accident.